

REMARKS

Favorable reconsideration and allowance of the subject application are respectfully requested in view of the following remarks.

Summary of the Office Action

Claims 1 and 13 stand rejected under 35 U.S.C. §102(b) as being anticipated by *Allen* (U.S. Patent No. 4,739,377).

Claims 14-18 are allowed.

Claims 2-12 stand objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form.

Summary of the Response to the Office Action

Applicants have canceled claim 2 without prejudice or disclaimer. Claims 1, 3, 4, 5, 7, 9, 10, and 13 have been amended by this amendment. Accordingly, claims 1 and 3-18 are currently pending.

The Disposition of the Claims

Applicants note with appreciation the Examiner's allowance of claims 14-18 and indication that claims 2-12 would be allowable as noted on Page 1 of the Office Action.

Applicants have rewritten claims 4, 5, 7, 9 and 10 in independent form including all the limitations of the base claim without narrowing the intended scope of the originally filed claims 4, 5, 7, 9 and 10. Thus, it is respectfully submitted that claims 4, 5, 7, 9 and 10 are now in condition for allowance. Further, since claims 6 and 8 depend from claims 5 and 7, it is respectfully submitted that claims 6 and 8 are also in condition for allowance.

In addition, Applicants have amended claims 1 and 13 to incorporate the subject matter in the originally filed claim 2, which has been indicated as containing allowable subject matter.

Thus, it is respectfully submitted that claims 1 and 13 are in condition for allowance. Further, since claims 3, 11 and 12 depend from claim 1, it is respectfully submitted that claim 3, 11 and 12 are also in condition for allowance.

Conclusion


In view of the foregoing, withdrawal of the rejections and objections, and allowance of the pending claims are earnestly solicited. Should there remain any questions or comments regarding this response or the application in general, the Examiner is urged to contact the undersigned at the number listed below.

Attached hereto is a marked-up version of the changes made by the current amendment. The attachment is captioned "Version with markings to show changes made."

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claim 2 has been canceled without prejudice or disclaimer.

Claims 1, 3, 4, 5, 7, 9, 10, 13 have been amended to read as follows.

1. (Amended) An image reading device that irradiates an object with a light and reads a reflected light, comprising:

a single light source capable of irradiating a visible light and an invisible light;

a reading unit that reads the reflected light from the object irradiated with the light from the light source; and

a controller that selectively switches an emission mode of the light source, wherein the emission mode includes a first mode for reading that uses the visible light and a second mode for reading that uses the invisible light, wherein the invisible light is an infrared light, and the light source emits at least a light including the infrared light in the second mode.

3. (Amended) The image reading device according to Claim [2] 1, wherein the infrared light has at least one emission peak, and the emission peak is within 800 nm to 1000 nm.

4. (Amended) An image reading device that irradiates an object with a light and reads a reflected light, comprising:

a single light source capable of irradiating a visible light and an invisible light;

a reading unit that reads the reflected light from the object irradiated with the light from the light source; and

a controller that selectively switches an emission mode of the light source, wherein the emission mode includes a first mode for reading that uses the visible light and a second mode for reading that uses the invisible light [The image reading device according to Claim 1], wherein the light source is a fluorescent lamp, and the emission mode is switched by changing an internal discharge state of the fluorescent lamp.

5. (Amended) An image reading device that irradiates an object with a light and reads a reflected light, comprising:

a single light source capable of irradiating a visible light and an invisible light;

a reading unit that reads the reflected light from the object irradiated with the light from the light source; and

a controller that selectively switches an emission mode of the light source, wherein the emission mode includes a first mode for reading that uses the visible light and a second mode for reading that uses the invisible light [The image reading device according to Claim 1], wherein the light source is a rare gas fluorescent lamp.

7. (Amended) An image reading device that irradiates an object with a light and reads a reflected light, comprising:

a single light source capable of irradiating a visible light and an invisible light;

a reading unit that reads the reflected light from the object irradiated with the light from the light source; and

a controller that selectively switches an emission mode of the light source, wherein the emission mode includes a first mode for reading that uses the visible light and a second mode for reading that uses the invisible light [The image reading device according to Claim 1], wherein the light source is a fluorescent lamp, and the fluorescent lamp comprises a sealed container inside which a phosphor brought into emission by a discharge is disposed, a pair of internal electrodes disposed inside the sealed container, and a pair of external electrodes disposed outside thereof.

9. (Amended) An image reading device that irradiates an object with a light and reads a reflected light, comprising:

a single light source capable of irradiating a visible light and an invisible light;

a reading unit that reads the reflected light from the object irradiated with the light from the light source; and

a controller that selectively switches an emission mode of the light source, wherein the emission mode includes a first mode for reading that uses the visible light and a second mode for reading that uses the invisible light [The image reading device according to Claim 1], wherein the emission mode is switched by adjusting a current applied to the light source.

10. (Amended) An image reading device that irradiates an object with a light and reads a reflected light, comprising:

a single light source capable of irradiating a visible light and an invisible light;

a reading unit that reads the reflected light from the object irradiated with the light from the light source;

a controller that selectively switches an emission mode of the light source, wherein the emission mode includes a first mode for reading that uses the visible light and a second mode for reading that uses the invisible light; [The image reading device according to Claim 1, further comprising]

an infrared cutoff filter; [,]

a visible light cutoff filter; [,] and

a filter switching part that selectively locates either the infrared cutoff filter or the visible light cutoff filter between the object and the reading unit, wherein the filter switching part locates the infrared cutoff filter between the object and the reading unit in the first mode, and locates the visible light cutoff filter between the object and the reading unit in the second mode.

13. (Amended) An image reading method that irradiates an object with a light and reads a reflected light, comprising the steps of:

switching an emission mode of a single light source capable of irradiating a visible light and an invisible light in accordance with a reading mode selected from a visible image reading mode and an invisible image reading mode, and

reading the reflected light from the object irradiated with the light from the light source while bringing the light source into emission in accordance with the emission mode switched,

wherein the invisible light is an infrared light, and the light source emits at least a light including the infrared light in the second mode.